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OM nucleic nucleic search, using sw model

Run on: September 1, 2000, 01:01:08; Search time 261.02 Seconds (without alignments) 4319.238 Million cell updates/sec

Title: Perfect score:

Sequence:

Scoring table:

IDENTITY_NUC
Gapop 10.0 , Gapext 1.0

Total number of hits satisfying chosen parameters:

243080 seqs, 68777915 residues

num DB seq length: 0 num DB seq length: 1000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

Database : Issued_Patents_NA:*
1: /cgn2_6/ptodata/2,
2: /cgn2_6/ptodata/2,
3: /cgn2_6/ptodata/2, /gn2_6/ptodata/2/ina/5A_COMB.seq:*
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/cgn2_6/ptodata/2/ina/FCTUS_COMB.seq:*
/cgn2_6/ptodata/2/ina/PCTUS_COMB.seq:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

22222	c 210 220 210 210 210	0000 321	Result
298.2 290.2 274.8 274.8 274.8	259 200 200 200 200 200 200 200 200 200 20	2240.2 1739.4 1739.4 1739.4 1739.4 1588.4 1588.4 1588.4 1588.4 1588.4 1588.4 1588.4 1588.4 1588.4 1588.4 1588.4 1588.4 1588.4	Score
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Sequence 7, Appli Sequence 3, Appli Sequence 5, Appli Sequence 6, Appli	9, 310 310 310 2, 13,	1,000 mm	Description

Query Match
Best Local Similarity
Matches 4358; Conserv

Conservative

27.3%; 59.0%;

Score 2240.2; DB 5; Pred. No. 0; 2; Mismatches 2820;

Indels

207; Gaps

Length 8535;

320 agcagacgtgctaggaggatcacaggctgccaccctgggggacgccccggggaggtgggga 379

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ALIGNMENTS

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; NAME/KEY: misc_feature
; LOCATION: 1..8535
; OTHER INFORMATION: /standard_name~ "Galv SEATO Genome"
US-08-716-351A-1
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US-08-716-351A-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 1, Application US/08716351A Patent No. 6033905
                                                                                                                                                                                                                 REFERENCE/DOCKET NUMBER: 1528
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 543-9600
TELEFAX: (415) 543-5043
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 8535 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                      PRIOR APPLICATION DATA:
APPLICATION NUMBER: PCT/US94/03784
FILING DATE: 06-APR-1994
ATTORNEY/AGENT INFORMATION:
NAME: Bastlan,, Kevin L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SOFTWARE: Patentin Release #1.0, Version #1.25 CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TITLE OF INVENTION: Gibbon Ape Leukemia Virus-Based TITLE OF INVENTION: Retroviral Vectors
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NUMBER OF SEQUENCES:
                                                                                        FEATURE:
                                                                                                                                  MOLECULE TYPE:
                                                                                                            HYPOTHETICAL:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: US/08/716,351A
                                                                                                                                                     TOPOLOGY:
                                                                                                                                                                         STRANDEDNESS:
                                                                                                                                                                                           TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                                                     REGISTRATION NUMBER: 34,774
                                                                                                                                                        linear
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Qy	1514	gagagettgaaaatetategeeaggetetggtggegggteteegggggegteaagaeg 1	573
DЪ	1942	N	001
Qy	1574	- t	633
ф	2002	N)	061
Qy	1634	رم س	693
DЬ	2062	> -	121
Оу	1694	ggcccagaaagcctcagtggcctggccttcattgggcagtcggctctggatatcaggaa l	1753
ф	2122	GGACAACAGGCTGCGGTCGCCATGGCCTTTATCGGACAGTCAGCCCCAGATATCAAGAA	181
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뭣	2362	GGCCGCAGTAGTAAGTAGAGAAGGGTCCACAGGGTAGGCAGGC	2421
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919 1341	60 atgggttaaaccatggctaaataaaccaagaaagccaggtccccgaatcctggctcttgg 	128
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439 864	0 gagccagggacgcctggtggtctcctactgtcggtcagaggaccgagttctgttgtaaa	38 81
815	56 AACAGACGTGTTCGGGGCTCACCGCCTGGTAATCCAGGGAGACGTCCCAGGATCAGGGGA	75

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3424 3244 3184 3064 3612 ggatgagcgtaagggagtagcccgaggagttttaaccccaaaccctaggaccatggaggag 3724 GTACCTACTCAAGGAAGGAAAAAGATGGCTAACCCCAGCCCGAAAGGCTACTGTTATGAA 2592 ccaagcctgggcagaaaccgcagggatgggtttggcaaagcaagttcccccacaggttat 2651 2947 ACTACATGAAAAGCCAGTACCCTCCTCTATCGA---CCCATCCTGGCTCCAGCTTTTCCC 2532 actatattctccccaagtaaagcctgatcaagatatacagtcctggttggagcagtttcc 3664 CTTGCTGTCAGCCCCTGCATTGGCCCTCCCAGACCTCACCAAGCCATTCACTCTATATAT agccaccaaacaggactgcttagaaggtacgaaggcactactgctggaattgtctgacct 3251 tcaactgaaggccagtgctacaccagtatcagtcagacagtaccccttgagtagagaggc CACTGTATGGGCAGAAAGAGCCGGCATGGGACTAGCCAATCAAGTCCCACCAGTGGTAGT cctgctgagcgcacctgctctggccctccctgacgtaacctaaaccctttaccctttatgt 3611 cttaaaagatgccttcttctgcctgagattacaccccactagccaaccactttttgcctt 3011 aaaagggggattctcctgggctcctgagcaccagaaggcatttgatgctatcaaaaaggc CGAGTGGAAAGACCCAGAAAAAGGTAACACAGGTCAGCTGACCTGGACGCGGCTACCACA gaacccttataacctcttgagcgccctcccgcctgaacggaactggtacacagtattgga TCGGTCGCCCTGGAATACCCCTCTGCTACCTGTAAAAAAGCCAGGGACCAATGACTATCG CAGGCTCTGGATCCCTGGGTTTGCTTCCCTGGCTGCACCCTTGTACCCCCTAACAAAAGA cagactgtggatcccggggtttgcgaccttagcagccccactctacccgctaaccaaaga **AATCCCTGTTCCTACGACCCCCAGACAGGTCCGTGAATTTCTAGGCACTGCCGGATTCTG** gataccggccccaaccagccaaacaagtgagagagtttttggggacagctggattttg gtacagtttgcggggcgggcagcgatggctgacggaagcaggaagaaaactgtagtcca GGGGTACCGGGTATCGGCTAAGAAGGCCCCAGCTCTGCCAGAGAGAAGTCACCTATCTGGG TAGGGCCCTCAACCCCCAGGTGGTGTTACTCCAATATGTGGACGACCTCTTGGTGGCCGC caggatccaacaccctcaggtgaccctcctccagtacgtggatgacctgcttctggcggg AGGGTTCAAGAACTCTCCCACTCTTCGACGAGGCCCTCCACCGAGATTTGGCTCCCTT agggttcaagaactccccgaccatctttgacgaagccctacacagggacctggccaactt 3131 **AAACCCTTACAATCTTCTGAGTTCCCTTCCGCCTAGCTATACTTGGTACTCAGTCTTAGA** GCCAGTTCAAGACCTGAGAGAAATTAATAAAAGGGTACAGGATATTCATCCCACAGTCCC accagtacaggacttgagagaggtcaataaaagggtgcaggacatacaccccaaccggtccc ccaatccccttggaatactcccctgctaccggttaggaagcctgggaccaatgattatcg TCGGGAAGGTATCAGACCCCACATCCAGAAGTTCCTAGACCTAGGGGGTCTTGGTGCCCTG tcgagaaggaatttggccgcatgttcaaagattaatccaacagggcatcctagttcctgt AGAGCTAAGATCAGGTGCCTCACCAGTGGCTGTTCGACAATATCCAATGAGCAAAGAAGC 3431 3423 2831 3963 3843 3543 3243 3123 3003 2591 2711

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	AAAG	tage	CCAG	CAT	Jaat.	TCAC	GTTG	actt	GCT	tota:	999a	TCTI	cttt	GACC	CITA	ttta	ACCA	acca	TAT	tac	LCL 	AATT	aatt	AGA	Laga:	AGCC!	aqcc	gaaa Gaaa	, LCAC	l 	COTTCC	
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5 6414 6826 6474 6886 6534 6594 6594 7006 6654 7006 6654 77063 7774 7123 7123 7123	6766	646 613 652 619 619 6586	62 63 64 607
			880 228 228 940 940 286 286 286 30 30

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COMPUTER READABLE FORM: MEDIUM TYPE: Floppy

Floppy disk

NUMBER OF SEQUENCES: 25
CORRESPONDENCE ADDRESS:
ADDRESSEE: Davis Hoxie Faithfull and Hapgood

915

STREET: 45 Rockefeller Pl

New York New York USA

STATE: COUNTRY:

10111

20 В 2 В 20 g 80 B Qy 밁 Q_y Q 8 B 뫄 δÃ B 밁 Š 밁 ; ANTI-SENSE: US-08-110-300A-8 Query Match Best Local Similarity Matches 4053; TELEFAX: 212-586-1461 INFORMATION FOR SEQ ID NO: 8: COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA: 1034 cagcacagggtgctgtgaggggacctctgcccctcctggagctccggtggtggagggacc 1093 1036 ACCAAACCTAGGCCTCAAGTCCTTCCTGATAGCGGAGGACCACTCATTGATCTACTCACG 1095 MOLECULE TYPE: SEQUENCE CHARACTERISTICS: CLASSIFICATION: 435 ATTORNEY/AGENT INFORMATION: HYPOTHETICAL: TELECOMMUNICATION INFORMATION: 976 CCCCCACTCTCGACCCCGCCCCAGTCCTCCCTCTATCCGGCTCTCACTTCTCCTTTAAAC 1035 693 gcctctgaatggccaacattcgatgttggatggccatcagaggggacctttaattctgaa 752 455 tccgcggccgtccgactcttttgcctgcttgtggaa--gacgcggacgggtcgcgtgtgt 512 974 ccgagatcgaggagccgccgacttggccggaaccccaacctgttcccccacccccttatc 1033 914 tottggagagaaaacaaacactoggoogaaaaagtogagoootottootogtatotaco 973 916 TTCGTGCACCCTAAACCTCCCCTCTCTCTTCCCCCCTTCAGCCCCCTCTCTCCCCACCTGAA 975 873 tggctaaa----------taaaccaagaaagccaggtccccgaatcctggc 913 676 GAACGGACAGCCCACAACCTGTCGGTAGAGGTTAGAAAAAGGCGCTGGGTTACATTCTGC 616 AACATGGGCCAGGCTGTTACCACCCCCTTAAGTTTGACTTTAGACCACTGGAAGGATGTC 675 558 CTGCTGCAGCATCGTTCTGTGTTGTCTCTGTTTGACTGTT--TTTCTGTATTTGTCTGAA 615 513 ctggatctgtttggtttctgtctcgtgtgtctttgtcttgtgtgtgtccttgtctacagtttt 572 813 gagccctatatccttacgtggcaagatttggcagaagatcctccgccatgggttaaacca 796 ATTATTACACAGGTTAAGATCAAGGTCTTCTCACCTGGCCCACATGGACATCCGGATCAG 753 attatectggetgttaaggeaateattttteagaetggaeeeggeteteateetgateag 736 TCTGCAGAATGGCCAACCTTCAACGTCGGATGGCCACGAGACGGCACTTTTAACCCAGAC 633 agatccagggctcataatttgtcagttcaggttaagaagggaccttggcagactttctgt 692 573 aatatgggacagacagtgactacccccttagtttgactctcgaccattggactgaagtt 632 TELEPHONE: 212-586-1461 APPLICATION NUMBER: US/0 FILING DATE: 20-AUG-1993 TOPOLOGY: STRANDEDNESS: TYPE: REFERENCE/DOCKET NUMBER: 32 LENGTH: nucleic acid Jacobs, 8323 base pairs Conservative linear 212-757-2200 Z O DNA (genomic) double Seth H. 21.2%; US/08/110,300A 32,140 1; Mismatches 3007; Indels 240; Gaps 11698A50 Score 1739.4; DB 1; Pred. No. 0; Length 8323;

557

27;

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About: Results were produced by the GenCore software, version 4.5, copyright (c) 1993-2000 Compugen Ltd.

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Search information block: ry: US-09-171-553-5

ry: Us-v. - 1194 ry length: 1194 Issued_Patents_NA:*

Search time (sec): 94.350000 Database sequences: 243080 Database length: 68777915

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seq_name: /cgn2_6/ptodata/2/ina/6_COMB.seq:US-08-716-351A-1 seq_documentation_block: Sequence 1, Application US/08716351A Patent No. 6033905 US-08-716-351A-1 GENERAL INFORMATION: TELEFAX: (415):543-5043
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REGISTRATION NUMBER: 34,774
REFERENCE/DOCKET NUMBER: 15280-128-1PC CLASSIFICATION: FILING DATE: APPLICATION NUMBER: US/08/716,351A MEDIUM TYPE: APPLICATION NUMBER: PCT/US94/03784 TELEPHONE: LOCATION: 1..8535
OTHER INFORMATION: /standard_name= "Galv SEATO Genome" NAME/KEY: misc_feature LOCATION: 1..8535 TOPOLOGY: linear STRANDEDNESS: single LENGTH: nucleic acid 8535 base pairs (415) 543-9600 (415) 543-5043 Floppy disk N O 06-APR-199 DNA (genomic) Gibbon Ape Leukemia Virus-Based Retroviral Vectors

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GlnAspCysLeuGluGlyThrLysAlaLeuLeuLeuGluLeuSerAs 367

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APPLICANT: Valenhuis, Arthur W.
APPLICANT: Vanin, Elio F.
TITLE OF INVENTION: No. 5710037el Retroviral Envelope and LTR and Retroviral Ve
NUMBER OF SEQUENCES: 14
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              6033 GGCGG 6037
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1133 yrLeuValLeuLeuThrThrProThrAlaValLysValGluGlyIlePro 1149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       5983 TGAGTCCTGGGAGCTGGAAAAGACTGATCATCCTCTTAAGCTGCGTATTC 6032
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                                                  ADDRESSEE: Carella, Byrne, Bain, Gilfillan, Cecchi, Stewart & Olstein STREET: 6 Becker Farm Road CITY: Roseland CITY: Roseland STATE: New Jersey
COUNTRY: U
                          USA
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COMPUTER READABLE FORM:

Date: Sep 1, 2000 9:18 AM OM of: US-09-171-553-4 to: Issued_Patents_NA:* out_format : pfs

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4.5e-20 5.7e-15 1.1e-06

6.5e-22

About: Results were produced by the GenCore software, Copyright (c) 1993-2000 Compugen Ltd.

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Search time (sec): 94.350000 Database sequences: 243080 patabase length: 68777915 Database: h information block: length: 524 US-09-171-553-4 Issued_Patents_NA:*

> seq_documentation_block: seq_name: /cgn2_6/ptodata/2/1na/6_COMB.seq:US-08-716-351A-1 US-08-716-351A-1 Patent No. Sequence GENERAL INFORMATION: TELEFAX: (415) 543-5043 INFORMATION FOR SEQ ID NO: 1: COMPUTER READA MEDIUM TYPE: TITLE OF INVENTION: SOFTWARE: PatentIn Release #1.0, Version #1.25 CURRENT APPLICATION DATA: APPLICANT: NUMBER OF SEQUENCES: FILING DATE: 06-APR-1994 ATTORNEY/AGENT INFORMATION: CLASSIFICATION:
> PRIOR APPLICATION NUMBER: SEQUENCE CHARACTERISTICS:
> LENGTH: 8535 base pairs
> TYPE: nucleic acid TELECOMMUNICATION INFORMATION: FEATURE: MOLECULE TYPE: HYPOTHETICAL: COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS FILING DATE: APPLICATION NUMBER: US/08/716,351A REGISTRATION NUMBER: 34.
> REFERENCE/DOCKET NUMBER: NAME: TELEPHONE: OTHER INFORMATION: /standard_name= "GalV SEATO Genome" NAME/KEY: misc_feature LOCATION: 1..8535 TOPOLOGY: STRANDEDNESS: single 1, Application US/08716351A 5, 6033905 READABLE FORM: Bastian,, Kevin linear (415) 543-9600 NO. Floppy disk DNA (genomic) Gibbon Ape Leukemia Virus-Based Retroviral Vectors PCT/US94/03784 34,774 15280-128-1PC

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101	yGluLy 1	17
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289 1868	GlnLeuGlnAsnGluIleAspMetGlyPheProLeuThrArgProGlyTr 30)5)17
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 1, Application US/08850961 Patent No. 6013517 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  512 ysGlyProLysValLeuAlaLeuGlu 520 :: |||||||||||||||||||| 520 2532 GAGAAGCCAAGGTTCTAGCCCTAGAT 2557
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COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOTTWARE: PATENTIA REPEASE #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2432 ACACCTAGGGATGGAAGACCTCCACTAGACAAAGACCAGTGCGCATACTG 2481
                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Respess, James G.
APPLICANT: De Polo, Nicholas J.
APPLICANT: Chada, Sunil
APPLICANT: Sauter, Sybille
APPLICANT: Bodner, Mordechai
APPLICANT: Driver, David A.
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                                                                                                                                                                                                                                                                                                         CORRESPONDENCE ADDRESS:
ADDRESSEE: Chiron Co.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 496 sLysGluLysGlyHisTrpAlaArgAsnCysProLysLysGlyAsn...L 512
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                                                                                                                                                                                                                                                                                                                                                            NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: Driver, David A.
TITLE OF INVENTION: CROSSLESS RETROVIRAL VECTORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             455 aValValGluGlyLysSerSerArgGluArgGluArgAspPheArgLysI 472
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                                                                                                                                                                                                                           CITY: Emeryville
STATE: California
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                              STREET:
                                                                                                                                                                                                     COUNTRY:
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                                                                                                                                                                                                                                                                              E: Chiron Corporation, Intellectual Property - R440
P.O. Box 8097
                                                                                                                                                                                                          USA
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US/08/850,961
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